

1.0-Meter Auto-Tracking Flyaway Antenna

RTP10-KU consists of a multi-panel dual reflector carbon fiber 1.0-meter ring focus dish with a motorized 3-axis auto-tracking system. The pedestal is mounted on a rigid aerolite support frame tripod. This manpack antenna can be used for Tx/Rx applications in the Ku band with military-level standards.



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• ELECTRICAL SPECIFICATION:

	Ku band	
	Receive	Transmit
Operation Frequency, GHz	10.95~12.75	13.75~14.5
Gain, Mid-band, dBi	$\geq 39.9+20\lg(f/12.50)$ dBi	$\geq 41.0+20\lg(f/14.25)$ dBi
Polarization	Linear	
XPD (on Axis), dB	35	35
VSWR	≤ 1.3	≤ 1.3
TX. Power Capability, KW		$\leq 100W$
Feed Interface	WR-75	WR-75
Isolation, TX to Rx, dB	85	
First Side lobe	≤ -14	

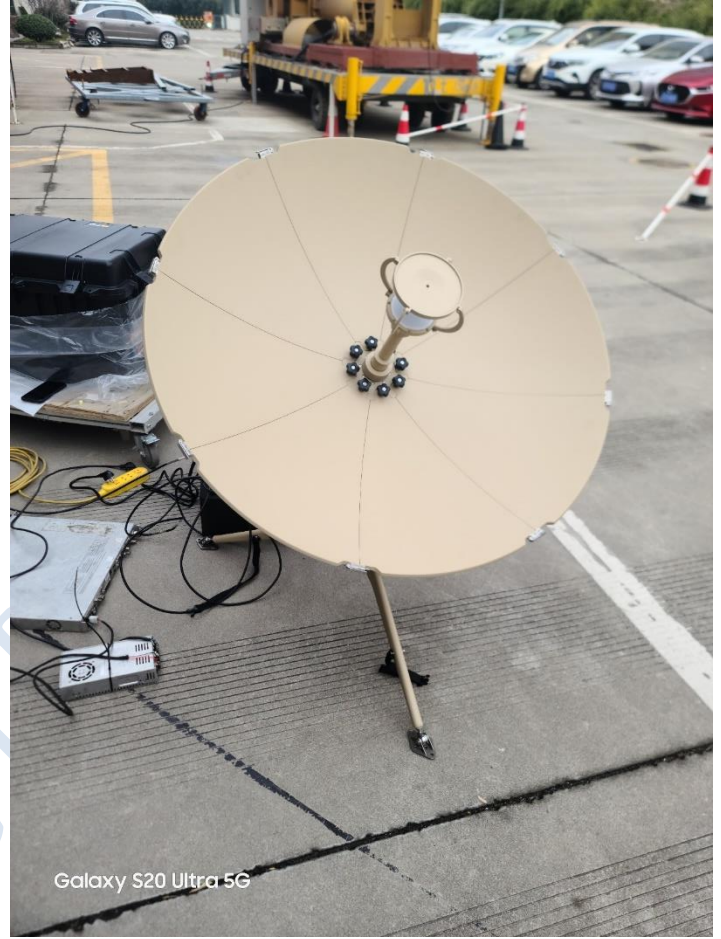
• MECHANICAL SPECIFICATION:

Antenna Diameter	1 Meter
Antenna Type	Ring Focus
Feed type	Field-replaceable unit
Material	Reflector: carbon fiber Support frame: aerolite
Mount Type	AZ/EL/POL motorized
Antenna Pointing Range	
Azimuth	$\pm 200^\circ$ (Continuous)
Elevation	$10^\circ \sim 90^\circ$ (Continuous)
Polarization	$\pm 90^\circ$ (Continuous)
Control Mode	Computer/Cell phone
Auto acquisition	Time of auto acquisition ≤ 2 minutes
Power supply	External, single-phase 220VAC
Motor Drive System	
Azimuth Travel Rate	0. $1^\circ \sim 3^\circ/s$
Elevation Travel Rate	0. $1^\circ \sim 3^\circ/s$
Polarization	0. $1^\circ \sim 3^\circ/s$
Parts	Antenna. controller, tracking receiver, LNB
Package	2
Gross weight	35 Kg
Net weight	26 Kg

• ENVIRONMENTAL SPECIFICATION:

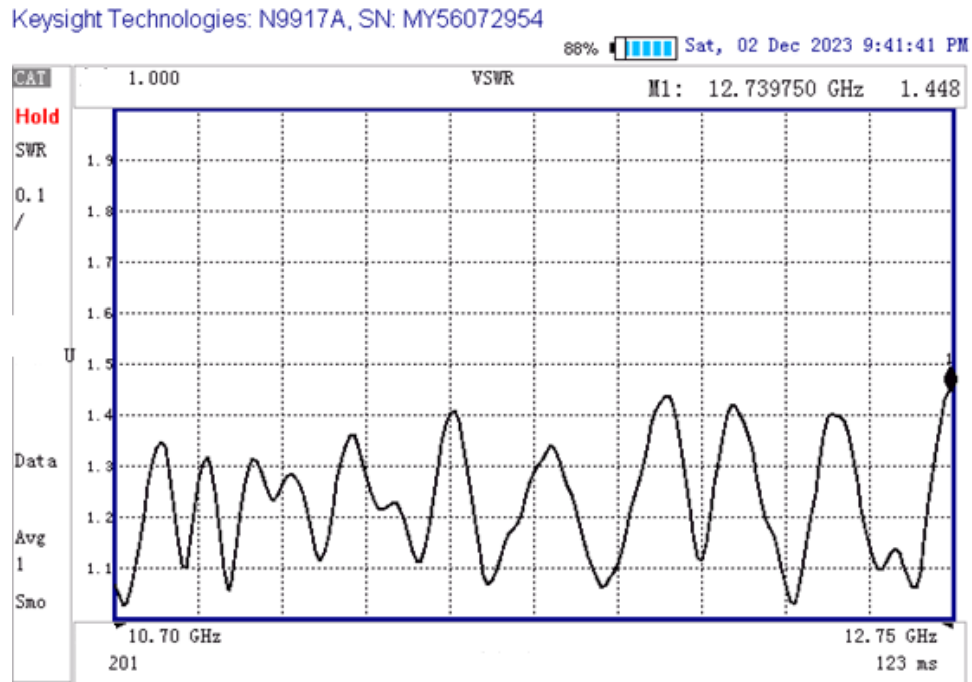
Operational Wind	11m/s (weight on mount)
Survival Wind	18m/s (weight on mount)
Temperature	$-40^\circ\text{C} \sim +60^\circ\text{C}$
Relative Humidity	$\leq 95\%$

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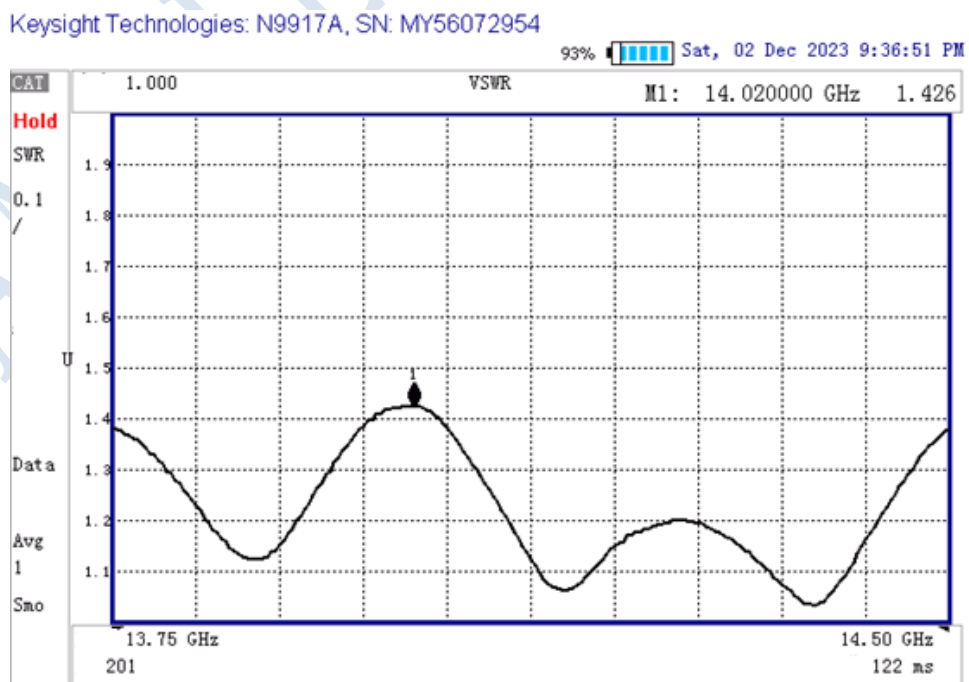


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- **VSWR- Rx:**



- **VSWR- Tx:**

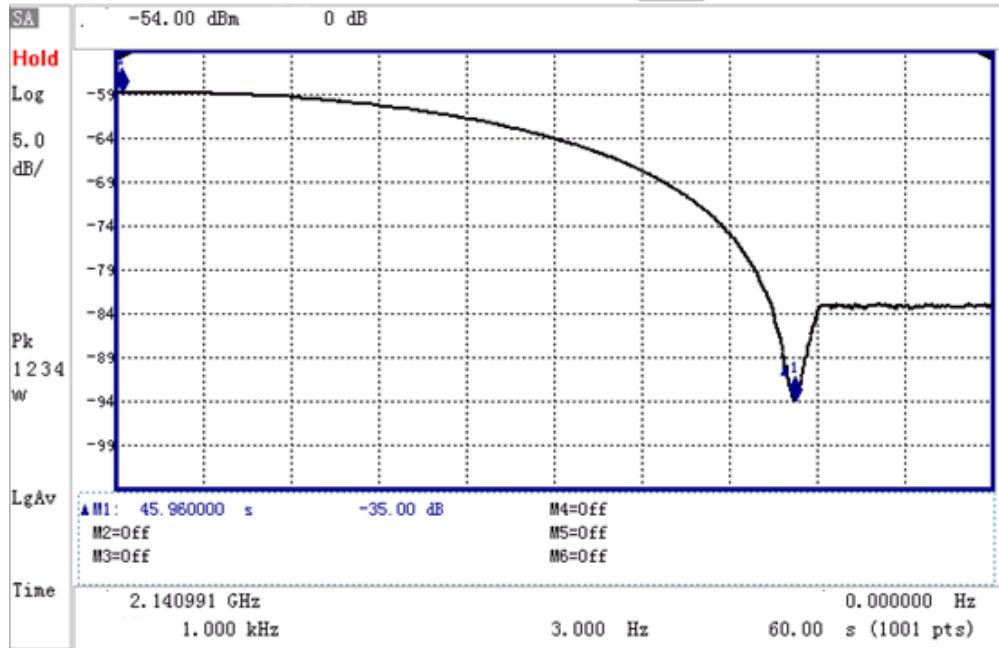


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- XPD (12.741GHz):

Keysight Technologies: N9917A, SN: MY57273107

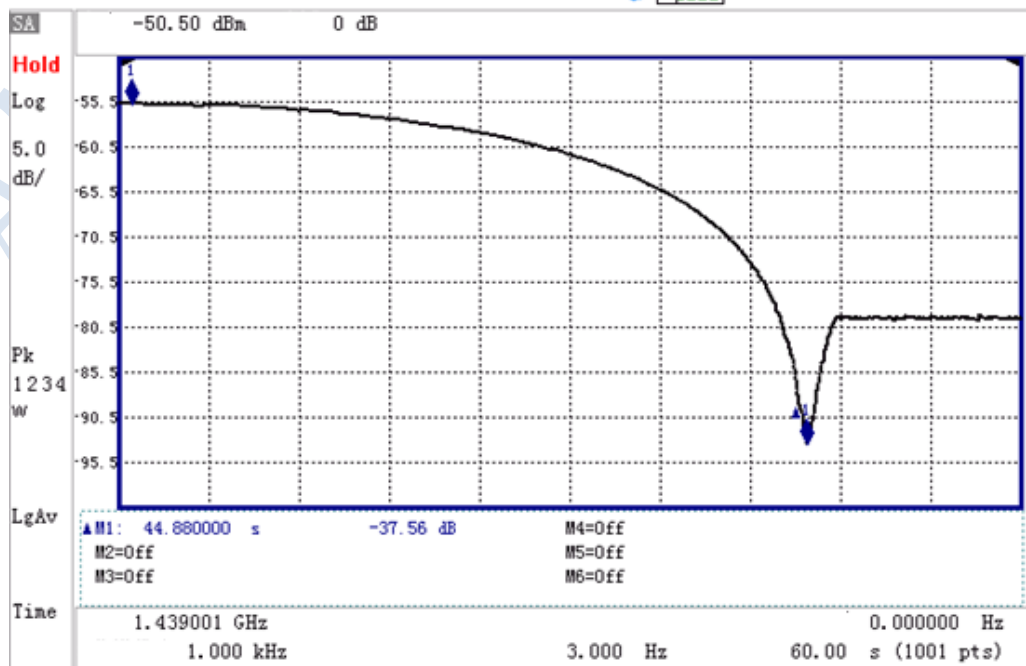
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- XPD (14.489GHz):

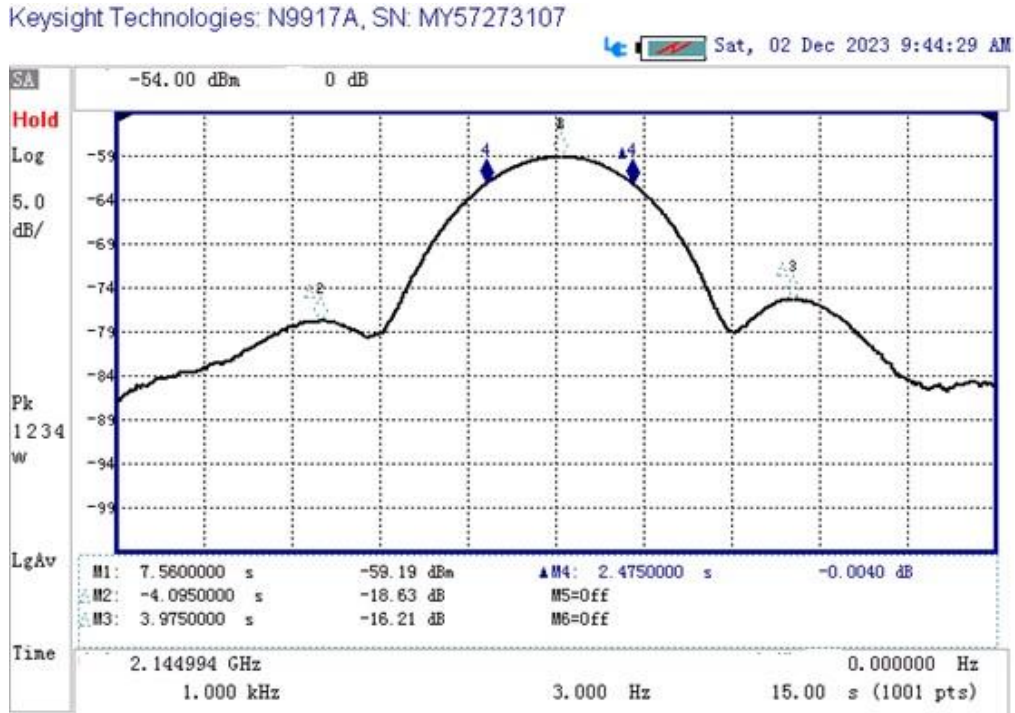
Keysight Technologies: N9913A, SN: MY56072953

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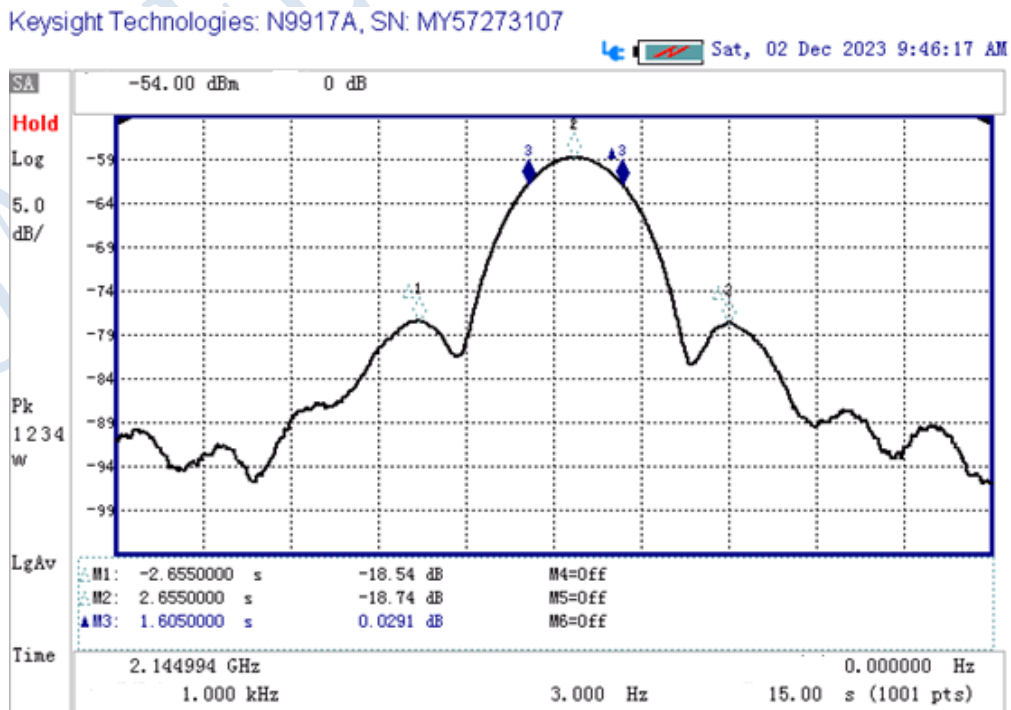


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- Sidelobe and main beam - Az (12.745GHz):



- Sidelobe and main beam - El (12.745GHz):

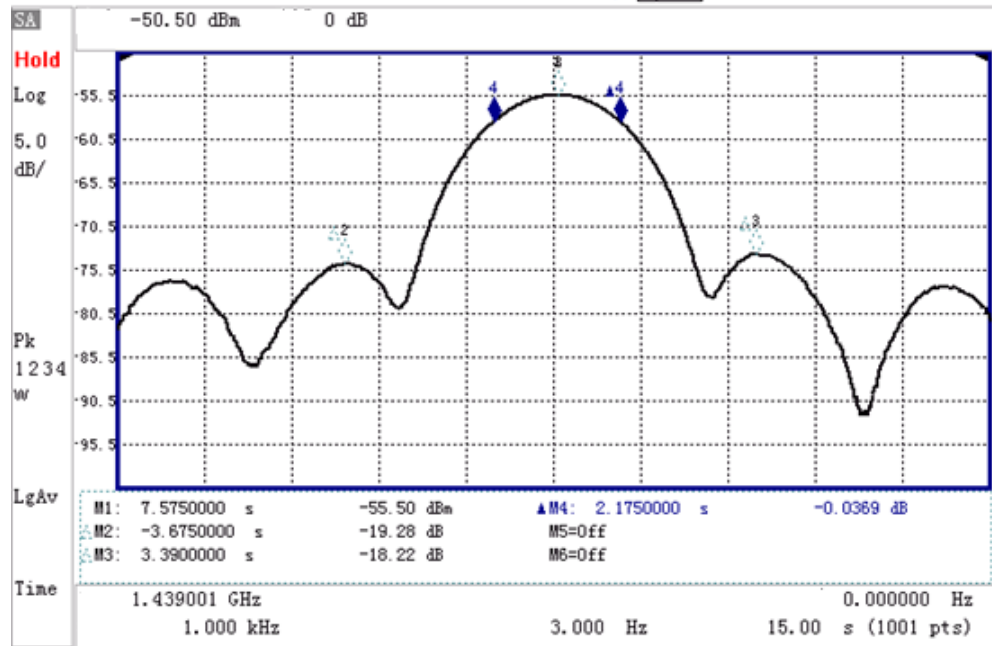


1.0-Meter Auto-Tracking Flyaway Antenna

- Sidelobe and main beam – Az (14.489GHz):

Keysight Technologies: N9913A, SN: MY56072953

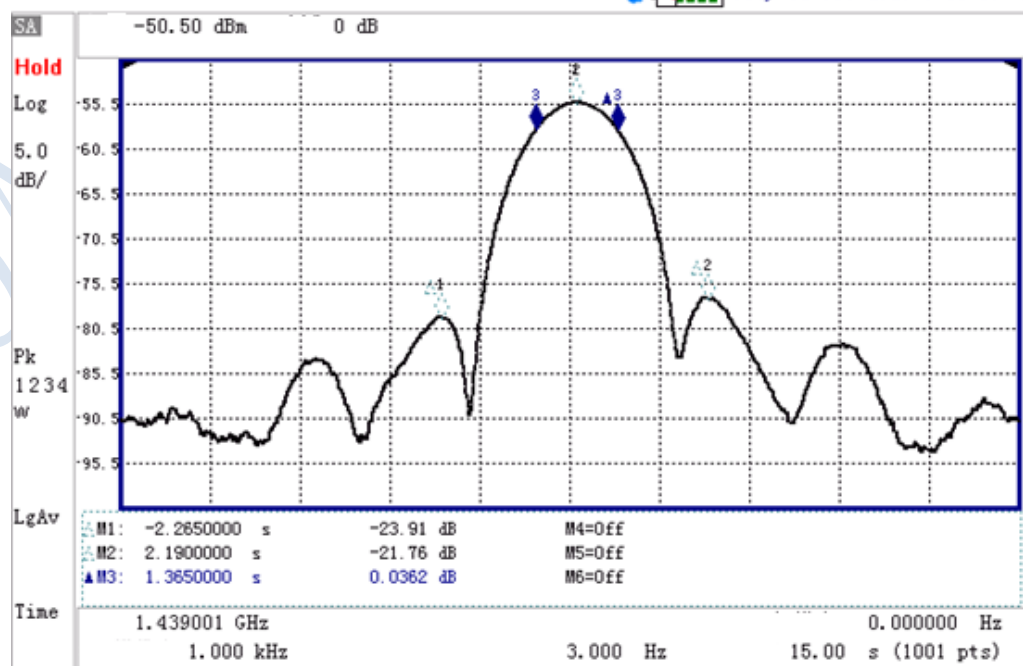
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- Sidelobe and main beam – El (14.489GHz):

Keysight Technologies: N9913A, SN: MY56072953

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- Tx to Rx Isolation:**

